

ABSTRACT

A non-blocking switching architecture having a fabric that is capable of switching on two levels by formatting signals crossing the switching fabric as “microcells” having a predetermined format. The microcells are routed by the switching fabric from an ingress line card to destination devices that can include egress line cards and/or processing resources. The processing resources can reformat the signals carried by the microcells to a second format. The reformatted signals can then be packaged as microcells and routed to a selected processing resource to provide switching in the second format. The processing resources transform the switched signals in the second format to a signal in the original format, which is carried by the switching fabric as microcells to an egress line card.